

In the Claims

1. (Amended) A [P]process for creating and utilizing gas from waste materials, wherein [in which] the waste materials are conveyed along a grate in a furnace and combustion air is supplied to the furnace, the grate including at least two [applied, **characterized by the fact** that] undergrate forced draft chambers [at least] arranged in the longitudinal direction of the grate, comprising: [have] supplying combustion air [applied] to the undergrate forced draft chambers [them] in such a way that the waste materials residing in [the] a charging area [of] above the grate at a first end thereof are ignited while oxygen is supplied at a superstoichiometric level, [and by the fact that] and at a second end of the grate, in the direction of slag removal, the combustion of the waste materials is limited to a substoichiometric level[, which is] necessary for gasification of the combustible components.

2. (Amended) The process of claim 1 further comprising: [Process as in Claim 1, **characterized by the fact that**] after ignition of the waste materials, mixing oxygen at a substoichiometric level [is mixed] into the gasified combustible components [gasification air].

3. (Amended) The p [P]rocess [as in] of [C]claim 1, **[characterized by the fact that]** further comprising: using an air ratio of 0.4 to 0.8, thereby to achieve substoichiometric gasification and a [the] gasification temperature of the gasified waste materials in the range of [to be gasified is] 600 to 850°C.

4. (Amended) [Process as in claim 1, **characterized by the fact** that the air ratio to achieve substoichiometric gasification is 0.4 to 0.8] The process of claim 2 further comprising: using an air ratio of 0.4 to 0.8, thereby to achieve substoichiometric gasification and a gasification temperature of the gasified waste materials in the range of 600 to 850°C.

5. (Amended) The p[P]rocess as in claim 1, [characterized by the fact that in] and further comprising: [utilizing the resulting gases] in a second furnace[,] which is operatively connected to the first furnace [either directly or via an exhaust gas flue, exclusively the] , using the generated gases to burn combustible components which come from only the first furnace [are burned].

6. (Amended) The p[P]rocess as in claim 1, [characterized by the fact that] further comprising: adding combustion air [in the form of ambient air is added] to the exhaust gas coming from the first furnace.

7. (Amended) The p[P]rocess as in claim 5 comprising: in the second furnace, adding combustion air to the exhaust gas coming from the first furnace wherein the grade and the amount of the combustion air, [characterized by the fact that in the second furnace a higher-grade combustible gas is] added [to the volatile components in accordance with] depends on the calorific value of the [latter] combustible components.

10.8. (Amended) The process of [Process as in] claim 7, characterized by the fact that] and further comprising: mixing oxygen [is mixed] into the combustion air [for] in the second furnace [and/or into the higher-grade combustible gas].

9. (Amended) The process of [Process as in] claim 5 and further comprising: [1 to 8, characterized by the fact that in the second furnace] recirculat[ed]ing exhaust gas from the second furnace, [which is removed from the exhaust gas stream] after cooling [down] in a heat recovery system [is introduced] thereby to mix the recirculated gas back into the second furnace with the gas coming from the first furnace [and burn out the gases].

10. (Amended) The process of [[Process as in] claim 5, characterized by the fact that the air ratio in the second furnace is 1.1 to 1.8.

11. (Amended) The p[P]rocess as in claim 5, characterized by the fact that the combustion temperature in the second furnace is 950 to 1250°C.

Please cancel claims 12-18.

Remarks

The Office Action acknowledges applicant's priority claim under Section 119, and confirms that the certified copies of the priority application have been provided to the U.S. Patent Office.

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